

IN THE CLAIMS

Please amend claims as follows:

1. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the image processing apparatus comprising:

a hierarchical coding unit to compress and code the image data in a state where the image data is divided for each hierarchical layer, to obtain compressed codes, wherein the hierarchical coding unit comprises:

a first-level coding unit to receive the image data and to create the compressed codes of a first hierarchical layer; and

a second-level coding unit to receive a sub-band of the first hierarchical layer from the first-level coding unit and to create the compressed codes of a second hierarchical layer, wherein the second hierarchical layer is a lower hierarchical layer than the first hierarchical layer; and

a distributively storing unit to distributively store the compressed codes that are divided for each hierarchical layer by the hierarchical coding unit, wherein the distributively storing unit comprises:

a first-level ~~physical~~ storing unit to store the compressed codes of the first hierarchical layer, without the compressed codes of the second hierarchical layer, in a first computer; and

a second-level ~~physical~~ storing unit to separately store the compressed codes of the second hierarchical layer ~~from the compressed codes of the first hierarchical layer, wherein the second level physical storing unit is physically separate from the first level physical storing unit, without the compressed codes of the first hierarchical layer, in a second computer~~.

2. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions

into which the image data is divided, the image processing apparatus forming an electronic equipment which is coupled to a network having other electronic equipments coupled thereto, and comprising:

a hierarchical coding unit to compress and code the image data in a state where the image data is divided for each hierarchical layer, to obtain compressed codes; and

a distributively storing unit to distributively store the compressed codes for each hierarchical layer separately by hierarchical layer into a physical storage unit of each of the other electronic equipments, wherein a first electronic equipment of the other electronic equipments is operable to store a first compressed code for a first hierarchical layer without a second compressed code for a second hierarchical layer, wherein a second electronic equipment of the other electronic equipments is operable to store the second compressed code for the second hierarchical layer without the first compressed code for the first hierarchical layer.

3. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the image processing apparatus comprising:

hierarchical coding means for compressing and coding the image data in a state where the image data is divided for each hierarchical layer, to obtain compressed codes, wherein the hierarchical coding means creates compressed codes for a first hierarchical layer and creates compressed codes for a second hierarchical layer; and

distributively storing means for distributively storing the compressed codes that are divided for each hierarchical layer by the hierarchical coding means, wherein the distributively storing means comprises:

means for physically storing the compressed codes of the first hierarchical layer, without the compressed codes of the second hierarchical layer, in a first computer; and

means for physically storing the compressed codes of the second hierarchical layer separately from the compressed codes of the first hierarchical layer, without the compressed codes of the first hierarchical layer, in a second computer.

4. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete

wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the image processing apparatus forming an electronic equipment which is coupled to a network having other electronic equipments coupled thereto, and comprising:

hierarchical coding means for compressing and coding the image data in a state where the image data is divided for each hierarchical layer, to obtain compressed codes; and

distributively storing means for distributively storing the compressed codes for each hierarchical layer separately by hierarchical layer into physical storage means of each of the other electronic equipments, wherein a first electronic equipment of the other electronic equipments is operable to store a first compressed code for a first hierarchical layer without a second compressed code for a second hierarchical layer, wherein a second electronic equipment of the other electronic equipments is operable to store the second compressed code for the second hierarchical layer without the first compressed code for the first hierarchical layer.

5. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the image processing apparatus comprising:

a rectangular region coding unit to compress and code the image data in a state where the image data is divided for each rectangular region, to obtain compressed codes, wherein the rectangular region coding unit creates compressed codes for a first rectangular region and creates compressed codes for a second rectangular region; and

a distributively storing unit to distributively store the compressed codes that are divided for each rectangular region by the rectangular region coding unit, wherein the distributively storing unit comprises:

a first physical-storing unit to store the compressed codes of the first rectangular region, without the compressed codes of the second rectangular region, in a first computer; and

a second physical-storing unit to separately store the compressed codes of the second rectangular region, without the compressed codes of the first rectangular region, in a second computer ~~from the compressed codes of the first rectangular region, wherein the second physical storing unit is physically separate from the first physical storing unit.~~

6. (Original) The image processing apparatus as claimed in claim 5, wherein the rectangular region coding unit compresses and codes the image data with a decomposition level dependent on a type of the image data, a type of region of the image data, a type of source electronic equipment of the image data or, an external instruction.

7. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the image processing apparatus forming an electronic equipment which is coupled to a network having other electronic equipments coupled thereto, and comprising:

a rectangular region coding unit to compress and code the image data in a state where the image data is divided for each rectangular region, to obtain compressed codes; and

a distributively storing unit to distributively store the compressed codes for each rectangular region separately by rectangular region into a physical storage unit of each of the other electronic equipments, wherein a first electronic equipment of the other electronic equipments is operable to store a first compressed code for a first rectangular region without a second compressed code for a second rectangular region, wherein a second electronic equipment of the other electronic equipments is operable to store the second compressed code for the second rectangular region without the first compressed code for the first rectangular region.

8. (Original) The image processing apparatus as claimed in claim 7, wherein the rectangular region coding unit compresses and codes the image data with a decomposition level dependent on a type of the image data, a type of region of the image data, a type of source electronic equipment of the image data or, an external instruction.

9. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the image processing apparatus comprising:

rectangular region coding means for compressing and coding the image data in a state where the image data is divided for each rectangular region, to obtain compressed codes, wherein the rectangular region coding means creates compressed codes for a first rectangular region and creates compressed codes for a second rectangular region; and

distributively storing means for distributively storing the compressed codes that are divided for each rectangular region by the rectangular region coding means, wherein the distributively storing means comprises:

means for physically storing the compressed codes of the first rectangular region, without the compressed codes of the second rectangular region, in a first computer; and

means for physically storing the compressed codes of the second rectangular region, without the compressed codes of the first rectangular region, in a second computer separately from the compressed codes of the first rectangular region.

10. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the image processing apparatus forming an electronic equipment which is coupled to a network having other electronic equipments coupled thereto, and comprising:

rectangular region coding means for compressing and coding the image data in a state where the image data is divided for each rectangular region, to obtain compressed codes; and

distributively storing means for distributively storing the compressed codes for each rectangular region separately by rectangular region into physical storage means of each of the other electronic equipments, wherein a first electronic equipment of the other electronic equipments is operable to store a first compressed code for a first rectangular region without a second compressed code for a second rectangular region, wherein a second electronic equipment of the other electronic equipments is operable to store the second compressed code for the second rectangular region without the first compressed code for the first rectangular region.

11. (Currently Amended) An article of manufacture comprising one or more recordable media having instructions stored thereon which, when executed by a computer, cause the computer to perform an image data processing method for hierarchically compressing and

coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the method comprising:

causing the computer to compress and code the image data in a state where the image data is divided for each hierarchical layer, to obtain compressed codes, wherein causing the computer to compress and code comprises:

creating the compressed codes of a first hierarchical layer; and

creating the compressed codes of a second hierarchical layer; and

causing the computer to distributively store the compressed codes which are divided for each hierarchical layer by the hierarchical coding procedure, wherein causing the computer to distributively store comprises:

physically storing the compressed codes of the first hierarchical layer, without the compressed codes of the second hierarchical layer, in a first computer; and

physically storing the compressed codes of the second hierarchical layer, without the compressed codes of the first hierarchical layer, in a second computer separately from the compressed codes of the first hierarchical layer.

12. (Currently Amended) An article of manufacture comprising one or more recordable media having instructions stored thereon which, when executed by a computer, cause the computer to perform an image data processing method for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the computer forming an electronic equipment which is coupled to a network having other electronic equipments coupled thereto, the method comprising:

causing the computer to compress and code the image data in a state where the image data is divided for each hierarchical layer, to obtain compressed codes; and

causing the computer to distributively store the compressed codes for each hierarchical layer separately by hierarchical layer into a physical storage unit of each of the other electronic equipments, wherein a first electronic equipment of the other electronic equipments is operable to store a first compressed code for a first hierarchical layer without a second compressed code for a second hierarchical layer, wherein a second electronic equipment of the other electronic

equipments is operable to store the second compressed code for the second hierarchical layer without the first compressed code for the first hierarchical layer.

13. (Currently Amended) An article of manufacture comprising one or more recordable media having instructions stored thereon which, when executed by a computer, cause the computer to perform an image data processing method for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the method comprising:

causing the computer to compress and code the image data in a state where the image data is divided for each rectangular region, to obtain compressed codes, wherein the causing the computer to compress and code comprises:

creating compressed codes for a first rectangular region; and

creating compressed codes for a second rectangular region; and

causing the computer to distributively store the compressed codes which are divided for each rectangular region by the rectangular region coding procedure, wherein the causing the computer to distributively store comprises:

physically storing the compressed codes of the first rectangular region, without the compressed codes of the second rectangular region, in a first computer; and

physically storing the compressed codes of the second rectangular region, without the compressed codes of the first rectangular region, in a second computer separately from the compressed codes of the first rectangular region.

14. (Original) The article of manufacture as claimed in claim 13, wherein causing the computer to compress and code comprises causing the computer to compress and code the image data with a decomposition level dependent on a type of the image data, a type of region of the image data, a type of source electronic equipment of the image data or, an external instruction.

15. (Currently Amended) An article of manufacture comprising one or more recordable media having instructions stored thereon which, when executed by a computer, cause the computer to perform an image data processing method for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform,

quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the computer forming an electronic equipment which is coupled to a network having other electronic equipments coupled thereto, the method comprising:

causing the computer to compress and code the image data in a state where the image data is divided for each rectangular region, to obtain compressed codes; and

causing the computer to distributively store the compressed codes for each rectangular region separately by rectangular region into a physical storage unit of each of the other electronic equipments, wherein a first electronic equipment of the other electronic equipments is operable to store a first compressed code for a first rectangular region without a second compressed code for a second rectangular region, wherein a second electronic equipment of the other electronic equipments is operable to store the second compressed code for the second rectangular region without the first compressed code for the first rectangular region.

16. (Original) The article of manufacture as claimed in claim 15, wherein causing the computer to compress and code comprises causing the computer to compress and code the image data with a decomposition level dependent on a type of the image data, a type of region of the image data, a type of source electronic equipment of the image data or, an external instruction.

17. (Currently Amended) An image processing apparatus for hierarchically compressing and coding image data by subjecting pixel values of the image data to a discrete wavelet transform, quantization and coding for each of one or a plurality of rectangular regions into which the image data is divided, the image processing apparatus comprising:

a hierarchical coding unit to compress and code the image data in a state where the image data is divided for each hierarchical layer, to obtain compressed codes, wherein the hierarchical coding unit comprises:

a first-level coding unit to receive the image data and to create the compressed codes of a first hierarchical layer; and

a second-level coding unit to receive a sub-band of the first hierarchical layer from the first-level coding unit and to create the compressed codes of a second hierarchical layer, wherein the second hierarchical layer is a lower hierarchical layer than the first hierarchical layer; and

a distributively storing unit to distributively store the compressed codes that are divided for each hierarchical layer by the hierarchical coding unit, wherein the distributively storing unit comprises:

a first-level ~~physical~~-storing unit to only receive the compressed codes of the first hierarchical layer from the first-level ~~physical~~-coding unit and to store the compressed codes of the first hierarchical layer, without the compressed codes of the second hierarchical layer, in a first computer; and

a second-level ~~physical~~-storing unit to only receive the compressed codes of the second hierarchical layer, without the compressed codes of the first rectangular region, in a second computer from the second-level ~~physical~~-coding unit and to store the compressed codes of the second hierarchical layer.